



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,163	03/19/2004	Shuichi Yonemura	033697-013	7414

21839 7590 07/28/2004

BURNS DOANE SWECKER & MATHIS L L P  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/804,163

Applicant(s)

YONEMURA ET AL.

Examiner

Bradley T King

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03192004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a pressure control valve for "controlling the fluid pressure at said outlet to become higher from zero to a control differential pressure" and "said control differential pressure generated by said electromagnetic pressure control valve". The meaning of these limitations are unclear as the valve itself does not appear to be capable of generating pressure. It appears that the valve allows a pressure differential, but the differential is generated by the pump.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3683

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by EP

1067032.

EP 1067032 discloses all the limitations of the instant claims including; an electromagnetic pressure control valve 142 having inlet and outlet ports respectively connected to said master cylinder and said wheel cylinder for controlling the fluid pressure at said outlet port to become higher from zero to a control differential pressure than the pressure at said inlet port in dependence on a control current applied thereto; a fluid pump 138 connected at ejection and suction ports thereof respectively to said outlet and inlet ports of said electromagnetic pressure control valve, and control means for operating said fluid pump and for setting said control differential pressure generated by said electromagnetic pressure control valve to an assist increase pressure at the execution of a brake assist control (see step 260) and to a stop holding pressure at the execution of a slope starting control (as broadly recited, see steps 130-170).

Regarding claim 2, EP 1067032 discloses a fluid pressure control device 121-126 having an inlet port, an outlet port and a drain port respectively connected to said outlet port of said electromagnetic pressure control valve, said wheel cylinder and a reservoir 136 for making said outlet port of said electromagnetic pressure control valve and said wheel cylinder connect with each other, disconnect from each other or connect with said reservoir; a first conduit connecting said ejection port of said fluid pump to said

Art Unit: 3683

outlet port of said electromagnetic pressure control valve and said inlet port of said fluid pressure control device: through a first check valve for preventing fluid from flowing toward said ejection port; and a second conduit connecting said suction port of said fluid pump to said drain port of said fluid pressure control device and said reservoir through a second check valve for permitting fluid to flow to said suction port.

Regarding claim 3, the stop holding pressure can be different from the assist increase pressure.

Regarding claims 4-5, the control of the vehicle assumes a stop holding pressure whenever the vehicle comes to a stop.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Hano et al (US# 2003/0137192).

Hano et al discloses all the limitations of the instant claims including: an electromagnetic pressure control valve 5 or 8 having inlet and outlet ports respectively connected to said master cylinder and said wheel cylinder for controlling the fluid pressure at said outlet port to become higher from zero to a control differential pressure than the pressure at said inlet port in dependence on a control current applied thereto; a fluid pump 4 connected at ejection and suction ports thereof respectively to said outlet and inlet ports of said electromagnetic pressure control valve, and control means for operating said fluid pump and for setting said control differential pressure generated by said electromagnetic pressure control valve to an assist increase pressure at the

Art Unit: 3683

execution of a brake assist control and to a stop holding pressure at the execution of a slope starting control. See paragraph [0053]

Regarding claim 2, Hano et al discloses a fluid pressure control device 5-6 having an inlet port 2b, an outlet port and a drain port 10 respectively connected to said outlet port of said electromagnetic pressure control valve, said wheel cylinder and a reservoir 307 for making said outlet port of said electromagnetic pressure control valve and said wheel cylinder connect with each other, disconnect from each other or connect with said reservoir; a first conduit connecting said ejection port of said fluid pump to said outlet port of said electromagnetic pressure control valve and said inlet port of said fluid pressure control device: through a first check valve for preventing fluid from flowing toward said ejection port; and a second conduit connecting said suction port of said fluid pump to said drain port of said fluid pressure control device and said reservoir through a second check valve for permitting fluid to flow to said suction port.

Regarding claim 3, the stop holding pressure can be different from the assist increase pressure.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hano et al (US#2003/0137192).

Hano et al discloses all the limitations of the instant claims with exception to the explicit disclosure the slope control having priority over the brake assist control. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the stop holding pressure when slope control is to be executed during brake assist control and to utilize the stop holding pressure when brake assist is to be executed during slope control as the vehicle is not moving during slope control, making brake assist unnecessary.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aizawa et al who shows a braking system.

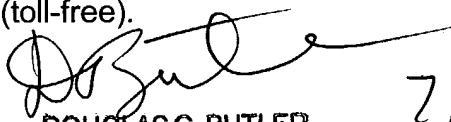
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

  
DOUGLAS C. BUTLER  
PRIMARY EXAMINER  
7/26/04  
AU 3683